

WE CLAIM:

1. A method of manufacturing electrochemical sensors, the method comprising steps of:
 - (a) forming a plurality of working electrodes on a first region of a substrate;
 - (b) forming a plurality of counter electrodes on a second region of the substrate;
 - (c) folding the substrate to overlay the first region and the second region;
 - (d) creating a sample chamber region between the first region and the second region; and
 - (e) separating a plurality of electrochemical sensors, each electrochemical sensor comprising at least one working electrode, at least one counter electrode, and at least one sample chamber region.
2. The method according to claim 1, wherein the step of folding the substrate comprises:
 - (a) scoring the substrate to form a score line; and
 - (b) folding the substrate along the score line.
3. The method according to claim 1, further comprising:
 - (a) positioning a spacer layer between the first region and the second region.
4. The method according to claim 3, wherein the step of positioning a spacer layer comprises:
 - (a) positioning an adhesive layer between the first region and the second region.
5. The method according to claim 4, further comprising:
 - (a) forming a plurality of indicator electrodes on the substrate in at least one of the first region and the second region; and

- (b) wherein the step of separating a plurality of electrochemical sensors comprises:
 - (i) separating a plurality of electrochemical sensors, each electrochemical sensor comprising at least one working electrode, at least one counter electrode, at least one indicator electrode, and at least one sample chamber region.
- 6. The method according to claim 1, wherein:
 - (a) the step of forming a plurality of working electrodes on a first region of a substrate comprises:
 - (i) forming a plurality of working electrodes on a first region of a substrate having a width and a length, the plurality of working electrodes arranged in columns parallel to the width and in rows parallel to the length; and
 - (b) the step of forming a plurality of counter electrodes on a second region of the substrate comprises:
 - (i) forming a plurality of counter electrodes on a second region of the substrate, the plurality of counter electrodes arranged in columns parallel to the width and in rows parallel to the length.
- 7. A method of manufacturing electrochemical sensors, the method comprising steps of:
 - (a) forming a plurality of working electrodes on a first substrate;
 - (b) forming a plurality of counter electrodes on a second substrate;
 - (c) forming a plurality of indicator electrodes on one of the first substrate and the second substrate;
 - (d) overlaying the first substrate and the second substrate to form a layered structure;
 - (e) creating a sample chamber region between the first substrate and the second substrate; and

- (f) separating a plurality of electrochemical sensors, each electrochemical sensor comprising at least one working electrode, at least one counter electrode, at least one indicator electrode, and at least one sample chamber region.

8. The method according to claim 7, wherein:

- (a) the step of forming a plurality of working electrodes on a first substrate comprises:
 - (i) forming a plurality of working electrodes on a first region of the first substrate; and
- (b) the step of forming a plurality of counter electrodes on a second substrate comprises:
 - (i) forming a plurality of counter electrodes on a second region of the first substrate.

9. The method according to claim 7, further comprising:

- (a) forming a plurality of working electrode contact pads;
- (b) forming a plurality of counter electrode contact pads;
- (c) forming a plurality of indicator electrode contact pads; and
- (d) wherein the step of separating a plurality of electrochemical sensors comprises:
 - (i) separating a plurality of electrochemical sensors, each electrochemical sensor having at least one working electrode contact pad, at least one counter electrode contact pad, and at least one indicator electrode contact pad.

10. The method according to claim 9, wherein the step of separating a plurality of electrochemical sensors further comprises:

- (a) cutting the second substrate to expose the working electrode contact pads,

- (b) cutting the first substrate to expose the counter electrode contact pads.
- 11. The method according to claim 10, wherein:
 - (a) the step of cutting the second substrate comprises:
 - (i) die cutting the second substrate; and
 - (b) the step of cutting the first substrate comprises:
 - (i) die cutting the first substrate.
- 12. The method according to claim 10, wherein after the steps of cutting:
 - (a) slitting the layered structure to provide individual electrochemical sensors.
- 13. The method according to claim 9, wherein:
 - (a) the step of forming a plurality of working electrode contact pads comprises:
 - (i) forming a plurality of working electrode contact pads, each working electrode contact pad in electrical contact with one of the working electrodes;
 - (b) the step of forming a plurality of counter electrode contact pads comprises:
 - (i) forming a plurality of counter electrode contact pads, each counter electrode contact pad in electrical contact with one of the counter electrodes; and
 - (c) the step of forming a plurality of indicator electrode contact pads comprises:
 - (i) forming a plurality of indicator electrode contact pads, each indicator electrode contact pad in electrical contact with one of the indicator electrodes.

14. The method according to claim 7, further comprising:
 - (a) depositing an enzyme over a portion of the working electrodes or the counter electrodes.
15. The method according to claim 14, further comprising:
 - (a) depositing an enzyme continuously over a portion of at least two of the working electrodes or at least two of the counter electrodes.
16. The method according to claim 7, further comprising:
 - (a) depositing a redox mediator over a portion of the working electrodes or the counter electrodes.
17. The method according to claim 16, further comprising:
 - (a) depositing a redox mediator continuously over a portion of at least two of the working electrodes or two of the counter electrodes.